DESE Model Curriculum

COURSE INTRODUCTION:

Course Rationale: Rapid technological advancement by businesses to reach global markets, greater focus on industry certifications and national skill standards, expansion of responsibilities of office workers, portability of employee skills—all these increase the need for business students in career education programs to have skills in Web design and maintenance.

Course Description: This course deals with the use of Web programming languages (HTML, Javascript, etc.), graphics applications, and other Web authoring tools to design, edit, launch, and maintain Web sites and pages. Such topics as Internet theory, Web page standards, Web design elements, user interfaces, special effects, navigation, and emerging Web technologies will be included.

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UNIT DESCRIPTION: In this unit, students will be introduced to using images. Students will learn the following:	SUGGESTED UNIT TIMELINE: 20-30 days
1. **What constitutes effective use of web images** 2. **Acquire digital images** 3. **Learn how to edit images to adjust and transform so they can be displayed on web pages** 4. **Utilize drawing tools and layers in graphic software** 5. **Learn about selection tools, tools for image manipulation, and blending techniques**	**CLASS PERIOD (min.): 50 minutes**

ESSENTIAL QUESTIONS:

1. **How will you design a web page that will effectively enhance the page without creating accessibility and usability problems?**
2. **How and why will you utilize graphic images created in an image editing program in an HTML web page?**

ESSENTIAL MEASURABLE LEARNING OBJECTIVES	CCSS LEARNING GOALS (Anchor Standards/Clusters)	CROSSWALK TO STANDARDS				
		GLEs/CLEs	PS	CCSS	NBEA	DOK
1. Recognize the different image types and their extensions (e.g., gif, jpg)					IT.III.3-4.5	**1**
2. Utilize images from various sources (e.g., Internet, CD, scanner, digital camera)					IT.V.2-4.2	**2**
3. Use image editing program to create original raster images (e.g., collages, banners, buttons)					IT.V.3.5	**4**
4. Use selection tools in image editing program (e.g., lasso, magic wand)					IT.V.3.5	**2**
5. Use layering techniques in image editing program to better manage images (e.g., ordering, arranging, naming)				N-Q.1 N-Q.2 N-Q.3	IT.V.3.5	**2**
6. Use image editing program to adjust and transform images (e.g., crop, rotate, skew, color, image				N-Q.1	IT.V.3.5	**2**

GRADE LEVEL/UNIT TITLE: 11-12/Demonstrate Image Creation and Manipulation Skills   Course Code: 034393 CIP Code: 11.0103

dimension size)				N-Q.2 N-Q.3		
7. Optimize an image to improve load time				N-Q.1 N-Q.2 N-Q.3	IT.V.3.5	**3**
8. Slice an image into separate parts					IT.V.3.5	**2**

ASSESSMENT DESCRIPTIONS*: (Write a brief overview here. Identify Formative/Summative. Actual assessments will be accessed by a link to PDF file or Word doc.)
*Attach Unit Summative Assessment, including Scoring Guides/Scoring Keys/Alignment Codes and DOK Levels for all items. Label each assessment according to the unit descriptions above (i.e., Grade Level/Course Title/Course Code, Unit #.)

Obj. #	INSTRUCTIONAL STRATEGIES (research-based): (Teacher Methods)
1	1. Class Discussion via handout and PowerPoint; have students create a glossary of extensions.
2	**2.** This Essential Measurable Learning Objective should be integrated as the content for Demonstrate Image Creation and Manipulation Skills is taught.
3 - 6	3. Class Discussion via Photoshop Tutorial
7	4. Ongoing discussion while working on projects – Saving Image as appropriate file extension for purpose at appropriate resolution (72 ppi for web)
8	5. Article Reading – Image Slicing – How and Why
Obj. #	INSTRUCTIONAL ACTIVITIES: (What Students Do)
1	1. ImageTypes.docx; DigitalGraphics.pptx; Add Web-Friendly types to glossary of terms
2	2. This Essential Measurable Learning Objective should be integrated as the content for Demonstrate Image Creation and

	Manipulation Skills is taught.
3 - 6	3. Color Me Crazy.docx
7	4. Article Reading - Impact of Image Optimization
8	5. Image Slicing – How and Why examples from article

UNIT RESOURCES: (include internet addresses for linking)

…DESE_WebDesign\C.DemonstrateImageCreationAndManipulationSkills\InstructionalStrategies

…DESE_WebDesign\C.DemonstrateImageCreationAndManipulationSkills\InstructionalActivities

Resources@MCCE - TE DVD ROM 3, Digital Photography: Crafting Images: Media West Home Video, LAKE GROVE, OR, MEDIA WEST HOME VIDEO, 2003. Learn the fundamentals of digital photography. Teaches the fundamentals of making, not taking, digital images. 97 minutes.